



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,634	01/29/2001	Fumio Yoshii	1858-25	6760

23117 7590 11/17/2003

NIXON & VANDERHYE, PC
1100 N GLEBE ROAD
8TH FLOOR
ARLINGTON, VA 22201-4714

EXAMINER

KRISHNAN, GANAPATHY

ART UNIT	PAPER NUMBER
----------	--------------

1623

DATE MAILED: 11/17/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/770,634

Applicant(s)

YOSHII ET AL.

Examiner

Ganapathy Krishnan

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15-50 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 16-21, 28-33 and 40-44 is/are allowed.
- 6) ☒ Claim(s) 8, 15, 22, 24, 25, 27, 34, 39, 45, 47, 48 and 50 is/are rejected.
- 7) ☒ Claim(s) 9-12, 23, 26, 35-38, 46 and 49 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other:

Art Unit: 1623

DETAILED ACTION

The amendment filed on September 08, 2003 (paper 10) has been received and entered into the record. The following information provided in the amendment affects the application:

1. Claims 13 and 14 have been cancelled.
2. Claims 1, 2, 5, 6 and 16-18 have been amended.
3. New claims 58-20 have been added.
4. Remarks drawn to 112-second paragraph and 102(b) rejections.

Claims 1-12 and 15-50 are pending.

Claim Objections

The objections to claims 5 and 6 have been overcome by amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The rejections of claims 1, 16 and 17 have been overcome by amendments to these claims.

Claims 15, 24, 27, 39, 47 and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1623

Claims 15, 24, 27, 39, 47 and 50 recite, “a product which comprises”. In the absence of a name it is not clear what product is being claimed. The claims are rendered indefinite without the actual product being specified.

Applicants’ arguments have been considered but are not found to be persuasive. Applicants argue that the term “product” may be broad but it must necessarily have the self-crosslinked alkyl cellulose. Even though the “product” must necessarily contain the self-crosslinked alkyl cellulose just merely stating what the product should contain still does not define the product. The claims are still rendered indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The rejections of claims 1, 2, 5 and 6 have been overcome by amendments and arguments advanced by the applicants.

Claims 8, 22, 25, 34, 45 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Leavitt (Journal of Polymer Science, 1961, vol. 51, pp. 349-357).

Leavitt drawn to crosslinking of cellulose discloses crosslinked methylcellulose (alkyl cellulose) (see page 350, under subheading “Discussion”, lines 1-6 and Table I on page 351). This disclosure of Leavitt is deemed to meet the limitations of Claims 8, 22, 25, 34, 45 and 48.

Art Unit: 1623

Claims 8, 22, 25, 34, 45 and 48 are product by process claims. Products by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps.

“Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Conclusion

1. Claims 1-7, 16-21, 28-33 and 40-44, drawn to a process for producing a self crosslinked alkyl cellulose comprising irradiating with radioactive rays a mixture of 100 parts by weight of alkyl cellulose wherein the alkyl group has 1 to 3 carbon atoms and part of the alkyl groups is substituted by carboxyl group and present in 5 to 2000 parts of water, wherein the said alkyl cellulose is carboxyalkyl cellulose, Hydroxyalkyl cellulose or alkyl cellulose, wherein 20% or more of the entirety of the carboxyl groups are in the form of an alkali metal salt, wherein the self crosslinked alkyl cellulose has a gel fraction of 0.1% or more, wherein the gel fraction is 0.1 to 30% and the self crosslinked alkyl cellulose after drying absorbs 20 times more weight its own weight in water, has a gel strength of 100g/cm.sq or more is neither taught or fairly suggested by the prior art of record which teaches chain degradation if concentrated solutions of the alkyl cellulose is used.

Art Unit: 1623

2. Claims 8, 15, 22, 24, 25, 27, 34, 39, 45, 47, 48 and 50 are rejected.

3. Claims 9-12, 23, 26, 35-38, 46 and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

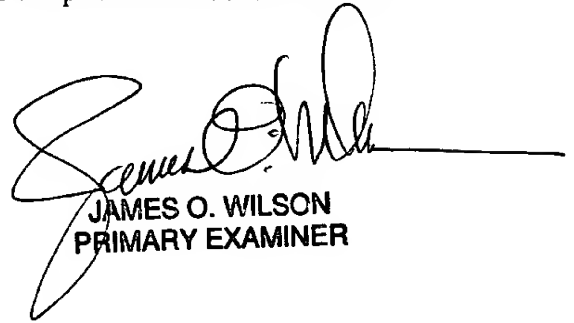
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 703-305-4837. The examiner can normally be reached on 8.30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 703-308-4624. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3014.

Art Unit: 1623

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

GK



JAMES O. WILSON
PRIMARY EXAMINER